

## STRUCTURES INCORPORATING POLYMER-INORGANIC PARTICLE BLENDS

### Abstract of the Disclosure

5                    Polymer-inorganic particle blends are incorporated into structures generally involving interfaces with additional materials that can be used advantageously for forming desirable devices. In some embodiments, the structures are optical structures, and the interfaces are optical interfaces. The different materials at the interface can have differences in index-of-refraction to yield desired optical properties at  
10 the interface. In some embodiments, structures are formed with periodic variations in index-of-refraction. In particular, photonic crystals can be formed. Suitable methods can be used to form the desired structures.